

## **REMARKS**

Claims 2-5, 7-15, 22-24, and 26-54 are now pending in the application. By this paper, Claims 2, 15, and 27 have been amended, Claims 16-21, and 25 have been cancelled without prejudice or disclaimer of the subject matter contained therein, and Claims 28-54 have been added. The basis for these amendments and new claims can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendments and following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **STATUS AND SUPPORT FOR CLAIMS**

1. (Cancelled)
2. (Currently Amended) See Col. 4, Ins. 4-16; Col. 6, Ins. 5-10; and Col. 7, Ins. 54-63.
- 3-5. (Previously Presented)
6. (Cancelled)
- 7-14. (Previously Presented)
15. (Currently Amended) See Col. 4, Ins. 4-16 and Col. 7, Ins. 54-63.
- 16-21. (Cancelled)
- 22-24. (Previously Presented)
25. (Cancelled)
26. (Previously Presented)

27. (Currently Amended)
28. (New) See Col. 4, Ins. 4-16.
29. (New) See Col. 4, Ins. 4-16.
30. (New) See Col. 4, Ins. 4-16 and Col. 7, Ins. 54-63.
31. (New) See Col. 4, Ins. 4-16.
32. (New) See Col. 4, Ins. 4-16.
33. (New) See Col. 4, Ins. 4-16.
34. (New) See Col. 9, Ins. 5-11.
35. (New) See Col. 9, Ins. 5-8.
36. (New) See Col. 9, Ins. 5-8.
37. (New) See Col. 4, Ins. 4-16.
38. (New) See Col. 4, Ins. 4-16.
39. (New) See Col. 4, Ins. 4-16; Col. 6, Ins. 5-10; and Col. 7, Ins. 54-63.
40. (New) See Col. 4, Ins. 4-16.
41. (New) See Col. 4, Ins. 4-16.
42. (New) See Col. 4, Ins. 4-16.
43. (New) See Col. 4, Ins. 4-16.
44. (New) See Col. 9, Ins. 5-11
45. (New) See Col. 13, Ins. 42-67.
46. (New) See Col. 13, Ins. 42-67.
47. (New) See Col. 13, Ins. 42-67.
48. (New) See Col. 6, Ins. 5-12; and Col. 7, Ins. 54-55.
49. (New) See Col. 4, Ins. 4-16.

- 50. (New) See Col. 4, Ins. 4-16.
- 51. (New) See Col. 9, Ins. 5-11.
- 52. (New) See Col. 13, Ins. 42-67.
- 53. (New) See Col. 13, Ins. 42-67.
- 54. (New) See Col. 13, Ins. 42-67.

#### **REJECTION UNDER 35 U.S.C. § 112**

Claims 2-5 and 7-27 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

Applicants have amended Claim 2 to call for "a fault value" rather than "said fault value" and have also amended Claim 2 to call for "an electronic stepper regulator" rather than "said electronic stepper regulator," and therefore respectfully submit that Claim 2 is in condition for allowance. Applicants have also amended Claim 15 to call for "a fault value" rather than "said fault value," and therefore respectfully submit that Claim 15 is similarly in condition for allowance. Because Claims 2 and 15 are believed to be in condition for allowance, Applicants respectfully request reconsideration and withdrawal of the rejections.

#### **REJECTION UNDER 35 U.S.C. § 102**

Claims 15-17 and 22-26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Alsenz (U.S. Pat. No. 4,651,535). This rejection is respectfully traversed.

Applicants have amended independent Claim 15 to include allowable subject matter identified by the Examiner. Specifically, Applicants have incorporated the allowable subject matter of Claim 18 into independent Claim 15, and therefore respectfully submit that independent Claim 15 is in condition for allowance. Because Claims 22-24 and 26 depend from independent Claim 15, Applicants respectfully submit that Claims 22-24 and 26 are similarly in condition for allowance. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

#### **REJECTION UNDER 35 U.S.C. § 103**

Claims 3-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Alsenz (U.S. Pat. No. 4,651,535) as applied to Claim 15 above, and further in view of Jensen et al. (U.S. Pat. No. 5,555,195). This rejection is respectfully traversed.

Independent Claim 15 is believed to be in condition for allowance in light of the foregoing remarks. Because Claims 3-5 depend from independent Claim 15, Claims 3-5 are similarly believed to be in condition for allowance. Accordingly, reconsideration and withdrawal of the rejection is respectfully traversed.

#### **ALLOWABLE SUBJECT MATTER**

The Examiner states that Claims 2, 7-14, 18-21 and 27 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112. Accordingly, Applicants have incorporated the allowable subject matter of Claim 18 into independent Claim 15, and therefore respectfully submit that independent Claim 15 is in condition for allowance. In addition, Applicants have redrafted Claim 2 in independent form incorporating the

limitations of Claims 2 and 15. Because the Examiner has identified Claim 2 as containing allowable subject matter, Applicants respectfully submit that Claim 2 is in condition for allowance.

### **NEW CLAIMS**

New Claims 28-54 are added for consideration. New Claims 28-49 include new independent Claims 39 and 48. New independent Claim 39 incorporates the allowable subject matter of previously presented Claim 20 and is therefore believed to be in condition for allowance. Accordingly, Applicants respectfully submit that new independent Claim 39, as well as Claims 40-47 dependent therefrom, are in condition for allowance.

The Examiner, in rejecting independent Claim 15, relied primarily on Alsenz (U.S. Patent No. 4,651,535), noting that Alsenz teaches comparing a duty cycle of a pulse width modulated signal to a preset condition to diagnose an expansion device. Applicants have drafted independent Claim 48 to call for a control system having a controller producing a variable duty cycle control signal for controlling a compressor and a module that compares the duty cycle with a predetermined value indicative of a system condition. The module issues a signal when the duty cycle bears a predetermined relationship to a fault value.


The Examiner, in identifying the allowable subject matter of Claims 18 and 20, has admitted that Alsenz fails to teach such a control system for use with an electronic stepper regulator or for use with a fan. Applicants respectfully submit that Alsenz similarly fails to teach such a control system for use with a compressor, as previously presented in Claim 16. Applicants respectfully submit that independent Claim 48, as well as Claims 49-54, dependent therefrom, are in condition for allowance.

## CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: February 2, 2006

By:   
Michael Malinzak  
Reg. No. 43,770  
Matthew H. Szalach  
Reg. No. 53,665

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

MM/MHS/ca